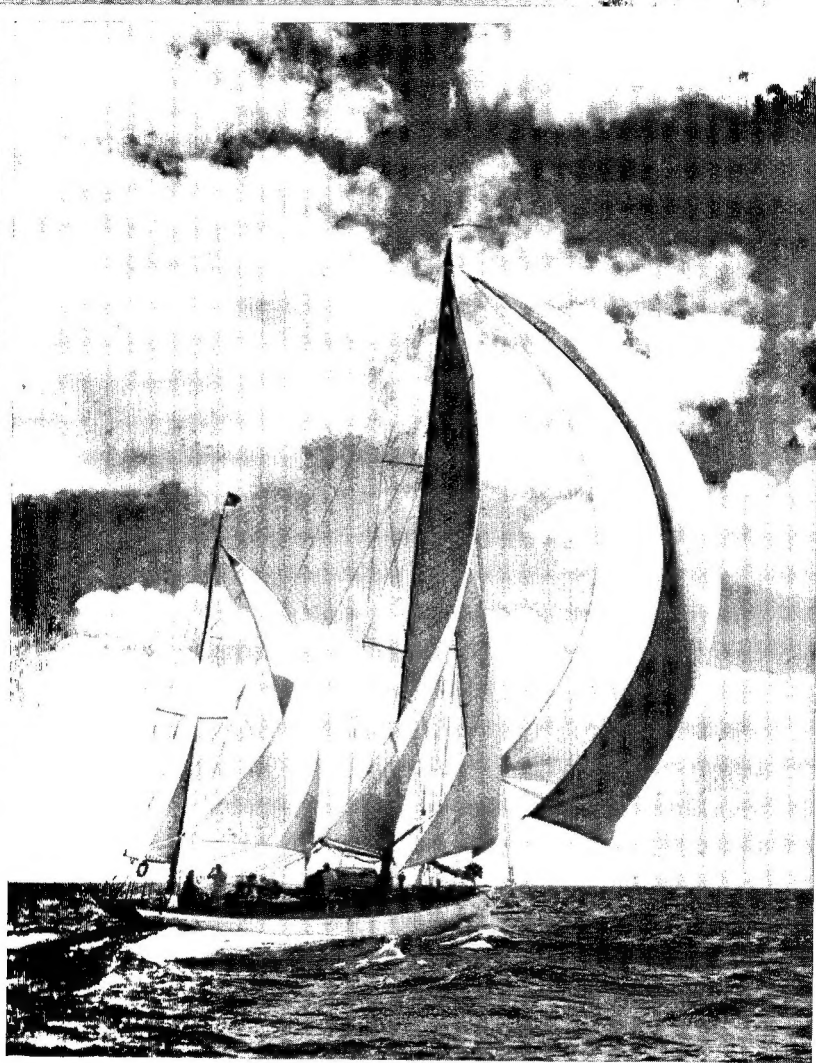


BETTER PHOTOGRAPHY
MADE EASY 25^c



AnSCO



NOTE: This booklet discusses black-and-white photography only. If you want complete information on Ansco ColorFilm and Printon—new full color materials which also can be processed in your darkroom—we suggest you read our new booklet, "Color Photography Made Easy."

PHOTOGRAPHY IS FUN

PHOTOGRAPHY is a popular hobby with almost everyone. This is not surprising, for everybody likes pictures and it's fun to take them.

Cameras and films have been improved so much that anyone—and that means boys and girls, too—can take satisfying pictures with inexpensive cameras. And your snapshots do not need to be limited to landscapes, picnics and outside shots around your home, because it is almost as easy to take pictures at night, or indoors.

Aside from capturing happy moments, friends' faces and beloved memories on film, part of the fun of photography lies in the great variety of pictures you can take. Outdoors you can take photographs of everything from a pretty woodland scene to Bobbie and his bike; at night you can take pictures of innumerable things, from the stars right on down to a "portrait" in your cellar.

Remember that indoor photography is easy—and don't forget that the most precious pictures are usually the everyday things that we all too often take for granted—mother preparing dinner, dad "fixing" a sticky drawer, sister doing her homework, or the young man of the house raptly listening to a radio adventure program. These are only a few suggestions of the many everyday possibilities offered by indoor photography, for there are also special occasions which you will prize more each year—the annual Christmas tree and birthday celebrations are two examples.

There is a humorous side to the hobby of photography, too. Many entertaining trick pictures can be made, even with the most inexpensive cameras. You

can turn a friend into "twins" or even "triplets." You can make ghost pictures that are really convincing, complete with a ghost you can see right through. And if you later decide to do your own darkroom work, further entertaining trick possibilities open up for you.

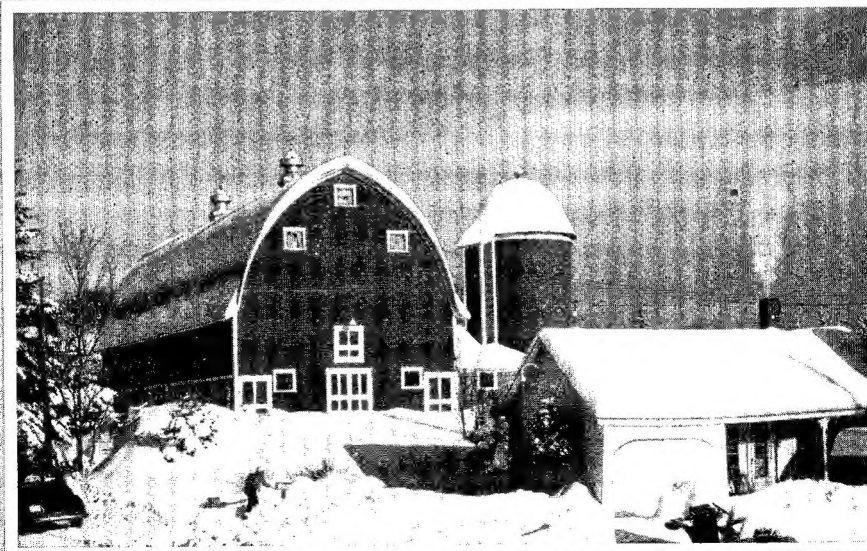
It's easy to see photography is fun the whole year around, indoors and out, day or night — and that takes in a lot of territory! You will get even more pleasure from photography if you choose the camera that suits your purposes, and if you keep in mind a few simple basic principles. "Better Photography Made Easy" is written with these thoughts in mind to help people like you. This booklet doesn't contain technical information. Instead, it presents the things you need to know in down-to-earth language. It not only shows you how to choose a camera and how to make your pictures better and more interesting, but offers valuable picture-taking ideas, tips on lighting and posing, hints on night photography and — how to get the most pleasure from your prints.

We know you will find picture-taking is fun; we believe that, after reading this book, you will discover it is easy as well. However, if you encounter difficulty, don't hesitate to write to Ansco, Binghamton, New York, for friendly advice and helpful criticism.





Pictures like these give lasting pleasure



CHOOSING A CAMERA

BEFORE WE TALK about picture-taking, let's discuss cameras. The camera you choose has an obvious influence on the amount of pleasure you will obtain from your hobby. If you enjoy long hikes in the woods taking pictures of interesting scenes, it is apparent that you should not select a heavy, bulky camera — it is too difficult to carry over long distances. On the other hand, there are other photographic reasons which make a large camera very desirable for certain purposes. This brings us to the first factor governing camera selection. Purpose. *What kind of pictures do you want to take?*

The other factor influencing your choice is, of course, the size of your pocketbook. *How much money do you want to spend?* It may be advisable to insert a word of caution about the price of camera you buy.

Some converts to photography have purchased expensive cameras in the belief that these would produce better pictures and prove easier to operate — some snap shooters have been a bit disappointed as a result. While the more expensive instruments *can* take excellent photographs under a wider variety of conditions, their sensitivity and many adjustments make them more complex for the novice to handle. Remember that some of the best pictures have been taken by inexpensive, easy-to-adjust cameras. There is always opportunity to upgrade yourself to a finer camera whenever you feel the need of a better instrument.

Cameras for general photographic purposes fall into the following general types:

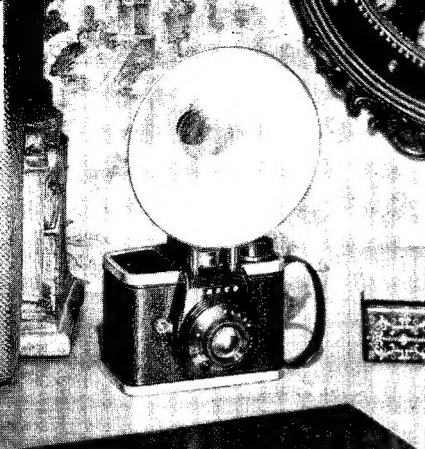
1. Box Cameras.
2. Simple Folding Cameras.
3. Folding Cameras.
4. Miniature Cameras.
5. Reflex Cameras.

If you have shopped around and looked at the price tags on cameras, you know that there is a great price range for cameras of the folding, miniature and reflex types; their cost may vary from a few dollars to \$50.00, \$100.00, or even more. However, cameras of any given type are basically similar, differing primarily in the quality of their lenses, shutters and other refinements. You can purchase a new camera of any one of the types listed on the preceding page at a reasonable figure, and many of them are very inexpensive.

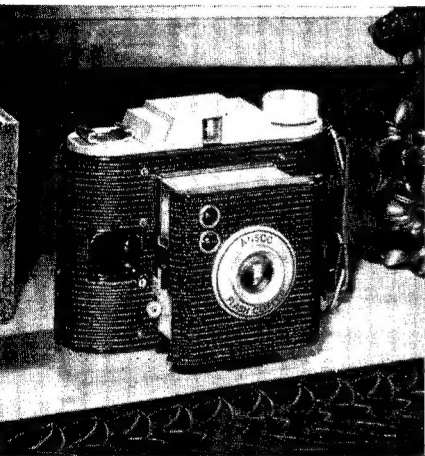
One of the most dependable ways to determine the quality of a camera is by examining the lens and shutter; good optical elements and shutter assemblies are relatively expensive and often comprise the major cost of an expensive camera. The lens and shutter are the eye and heart of your camera; they make the exposure — the remainder of the camera merely shuts out light and holds the film in the correct position.

Lenses are usually designated by "f" numbers which indicate their maximum apertures. For example, an "f/8" lens has a maximum aperture the diameter of which will go into its focal length (distance from lens to film) eight times — its diameter is 1/8 the focal length. Box cameras are usually equipped with f/15 lenses; they, of course, will go into the focal length fifteen times. Thus, we see that the *higher* the f number, the *slower* the lens. Lens quality is a prime consideration for those who plan to enter color photography, for only the better lenses are suitable. Color films are slower than black-and-white films and require a lens having a maximum aperture of at least f/6.3. Furthermore, these better quality lenses are color-corrected for accurate color rendition in the final transparencies.

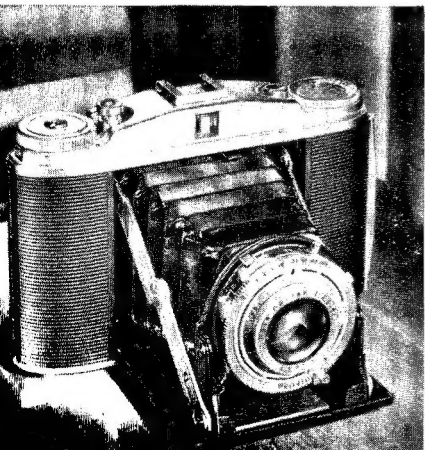
Box camera shutters usually operate at 1/35 or 1/50 of a second if they have no variable speeds indicated on them. They are usually calibrated "TI" or "TBI." The letters "T" and "B" mean Time and Bulb; "I" marked on a shutter indicates Instantaneous. (Time and Bulb exposures will be defined later.) Shutters so marked do not have adjustable speeds for hand-held snapshots. Shutters offering a choice of settings are preferable. Such settings are frequently marked "T, B, 25, 50, 100" or "T, B, 5, 25, 50, 100, 200." The figures indicate the denominator of the fraction of a second, i.e. 25 is 1/25, 50 is 1/50, etc. The shutter having the latter markings is to be preferred, since it has a wider range of shutter speeds.



Box Camera



Simple Folding Camera



Folding Camera

With this lens and shutter information in mind, let us discuss the common types of cameras and see how their characteristics and prices fit them for different photographic purposes:

1. *THE BOX CAMERAS.*—The box cameras are the popular standby in economical cameras, as well as the oldest type of camera. If record shots made outdoors in sunlight is all the photography you expect to do, the box camera will give satisfactory prints in album size at low cost. Since these cameras have a simple fixed focus lens, the distance from camera to subject should not be less than 8 or 10 feet.

2. *THE SIMPLE FOLDING CAMERAS.*—The simple folding cameras offer much the same advantages as those offered by box cameras, with the addition of the folding feature and improved external design. While these cameras cost slightly more, they present external refinements and streamlining which improve their appearance. In addition, some of these cameras have provision for synchronized flash.

3. *THE FOLDING CAMERAS.*—Folding cameras are very convenient to carry, since they may be folded flat. The most inexpensive folding cameras are, in effect, collapsible box cameras, since they do not have an adjustable lens, shutter or a focusing device. There are, however, cameras of this type in all price ranges up to the top-quality cameras costing over \$100.00. Folding cameras

are very handy for those who desire to carry their cameras with them on long walks, to sporting events, and the like.

4. *THE MINIATURE CAMERAS.*—The miniature cameras offer low operating cost and, of course, easy portability. However, the very small negative size requires accurate photographic techniques in order to secure satisfactory enlargements. If you are a beginner planning to do your own black-and-white processing at home, the 35mm candid type camera is not a recommended choice, for you should develop your photographic skills before attempting 35mm enlarging, or you may meet disappointments. On the other hand, for those who desire to take photographs in color for the purposes of projecting them later, the 35mm camera is a logical choice.

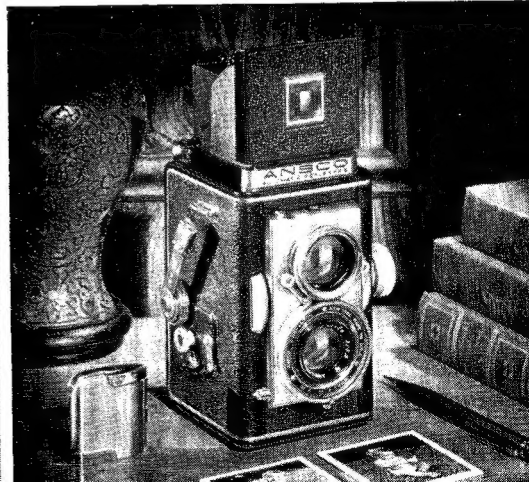
5. *THE REFLEX CAMERAS.*—Since there are few single-lens reflex cameras offered for the amateur photographer, we shall consider only the twin-lens reflex type. While cameras of this type are hardly less bulky than the box cameras, they offer convenient features which greatly aid the inexperienced photographer. The greatest single advantage offered is the full negative-size ground glass focusing screen which allows the enthusiast to get a preview of the image he will secure on the negative. This is accomplished by two lenses, one to expose the film and one to throw an image onto a concealed mirror, which reflects it to the ground glass. The reflex cameras, while they do not offer the folding feature, have become a favored camera type in recent years.

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Miniature Camera



Reflex Camera





Pictures of loved ones are easy to take and modest in cost. This young mother is making a splendid investment in future happiness.

HOW TO TAKE GOOD PICTURES

IT IS EASY to take good pictures—in fact, it is nearly as easy as it is to take disappointing ones. We cannot rightfully promise that you can take excellent pictures every time right at the start, but we can say that many budding photographers step right out with fine photographs.

How can they do this? The answer is this: they have found out that good photographs invariably result when two simple principles are used. They are:

1. Make your pictures interesting.
2. Make your pictures technically correct.

How these two rules can easily be applied to your own picture-taking will be outlined in the section which follows.

MAKE YOUR PICTURES INTERESTING

One of the greatest factors in getting picture interest is simplicity. Look at the photographs throughout this book and note how each one of them presents a single subject, or a central idea. There are many ways in which an inexperienced photographer can accomplish this—through selection of subject, by telling a photographic story and by using good picture composition.

WHAT TO PHOTOGRAPH

There is no limit to the subjects which will make good pictures; almost every scene about us could make an interesting picture, and nearly everything that people do has photographic possibilities. The possibilities are by no

means limited to outdoor snapshots in daylight, either. In addition to outdoor shots, such as landscapes, family or group outings, children at play and individual portraits, there are many excellent opportunities for the more unusual indoor and night photographs.

You don't need extra equipment to take pictures indoors — all you have to do is make sure that the camera and subject remain motionless during the exposure time. So why not try photographing baby taking his nap, the family bridge session, father "resting" (asleep, really) over the evening paper, and some of the activities of the tireless younger set? You'll get a load of pleasure from these indoor pictures.

If you are photographing inanimate objects, the problem is even simpler, since there is no danger of subject movement blurring the picture. You will prize these still life shots more and more as time goes on. For instance, how did your living room look six years ago? Do you remember the good times you used to have in that tiny kitchen in the first house you lived in? Don't you wish you'd photographed your last year's decorative centerpieces and flower arrangements?

Indoor pictures by natural (outdoor) light are easier if the subject is placed near a window. Ordinary house lights are usually sufficient for indoor pictures at night, although it may be advisable to move the lamps in toward the subject.

There are also plenty of easy-to-take, easy-to-look-at pictures outdoors at night. There are city street scenes, illuminated buildings, campfire gatherings, moonlight views, fire works and lightning flashes, to mention but a few. Once you get started in photography you'll see so many subjects you want to photograph, you'll hardly know which to take first, and picking the *best* subjects for your camera is part of the fun.

TELL A PICTURE STORY

One of the characteristics of a good picture story is clarity. Try to tell a simple photographic story, one which is understood at a glance.

You will find it easy to tell a story if you use people and pets in your photographs to help you tell it. Ask your subjects not to gaze into the camera as you take their pictures, but suggest that they engage in some familiar ac-

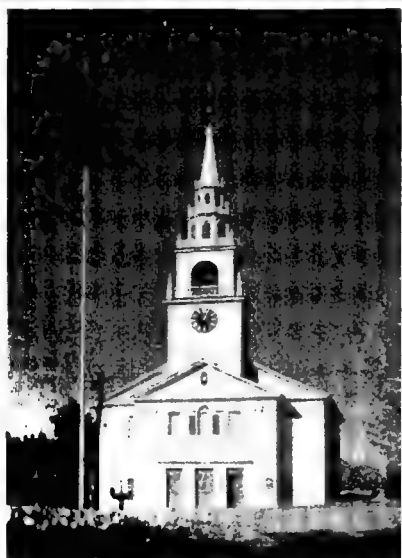


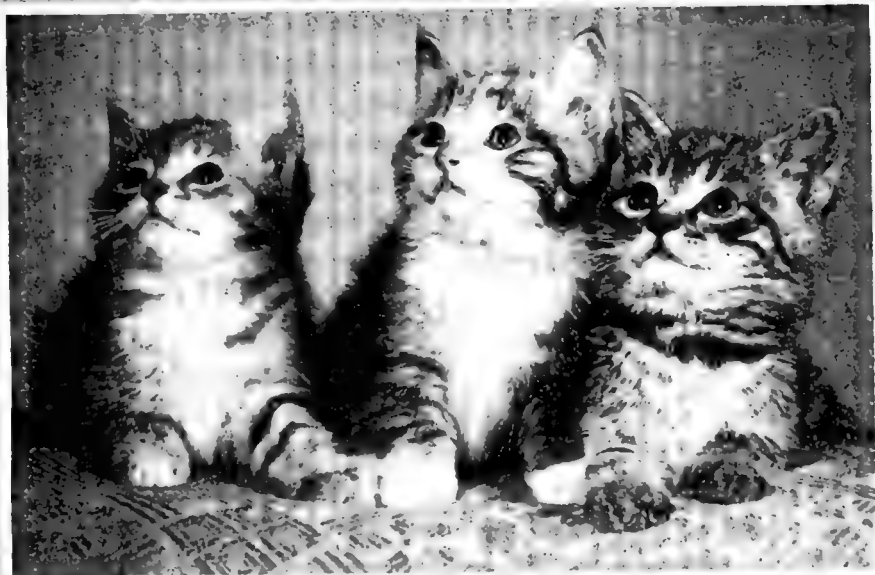
Big scenes, little scenes—they all make good pictures!





Keep your camera handy for shots like these.





A good motto: "Keep your pictures simple."





Good snapshots give pleasure the year round.



tivity. Pets usually do not understand complicated verbal instructions, so it's usually helpful to have someone assist you by holding the pet, diverting its attention, and the like.

If you could make yourself and your camera invisible, you'd get many excellent snapshots of unposed, natural subjects. But the next best thing is to have your "models" proceed with their normal everyday work or hobbies. In this way they tend to forget the photographer and become less self-conscious, with the result that the photographic story is strengthened and improved.

GOOD COMPOSITION CAN HELP

Good composition can be simply defined as the pleasing arrangement of all the component parts of the picture. A photograph which has good composition promotes a favorable reaction, although the person who views it may know nothing of composition — in fact, he may not even know why he likes the picture. Although the components of composition are many and each contains sub-components, they may be considered as four main principles. These are emphasis, unity, harmony and balance.

EMPHASIS. — Emphasis is obtained by making sure that the principal point of interest in the picture receives the most attention and that it subordinates all other areas. The methods commonly employed to accomplish this successfully are: (1) location — objects located near the center of the print usually receive more attention than those near the borders; (2) size — larger objects receive more emphasis than do smaller ones; and (3) contrast — light areas next to dark areas produce more accent than slight contrast differences.

UNITY. — This principle is closely related to the one mentioned above, for emphasis must be used to obtain a unified print. Unity states that there should be only one main interest center. It is a good idea to restrict the subject matter so that it not only is limited to one important object in the scene, but also that the subject is in keeping with its surroundings. Other related objects often exist in the same picture, but they should be subdued in position, size or lighting. An example of subordination: a photograph of a large sail boat which dominates the small boat tied alongside.

Beware of attempting to include the whole busy harbor scene in one pic-

ture; usually nothing of importance will stand out and the identity of individual boats will be lost in a maze of details. The dictates of unity also say that portraits should have unobtrusive backgrounds and that pictures should not contain unintentional jarring notes of incongruity.

HARMONY.—Harmony is in turn related to unity, in that no clashing opposition of line and mass should exist, unless a chaotic picture is desired. Harmony may take the form of rythmical repetition, as in the lines of the famous photograph, "Flying Spinnakers," or in the repeating theme of a row of stately arches.

Harmony is also found in the patterns that occur so universally in nature. Cloud bursts, ripples caused by a pebble dropped in a still pond, effect of wind on the branches of trees and gently winding roads are all familiar examples. The S curve is basically a harmonious line that contains just enough opposition within itself to provide an interesting composition.

BALANCE.—This last element of good composition has been explained in many ways, but in the final analysis, it amounts to common sense in arranging the weights and masses of your pictures. These should be so distributed that the picture will not appear to be top-heavy or lop-sided. This can usually be achieved by choosing a camera viewpoint that assures each area of the picture its proper share of attention.

Balance is, for example, concerned with the proper placement of small trees so that they balance a larger one on the other side of the print, like a group of small weights on a balance scale that are necessary to equalize a heavy object.

To sum it all up, if you are particular about the arrangement and appearance of the subject *before* the picture is taken, you will be rewarded by a photograph that is well-composed, one that invites favorable attention and comment from others.

MAKE YOUR PICTURES TECHNICALLY GOOD

In photographic activities as in other crafts, a knowledge of the tools of the trade is very desirable for the best results. This does not mean that you should be a photographic technician but, like the carpenter who knows his saw and hammer, you ought to be familiar with your camera and film. A little time

and experimentation will give you a familiarity with your equipment,—a familiarity that means confidence when taking pictures and pride in displaying them. This, then, is our first rule for making our pictures technically good: *Know your camera and film.*

KNOW YOUR CAMERA

As many of us know, the basic function of a camera is very simple: it is made to expose a light-sensitive film very briefly to focused rays of light. To expose the film properly, the simplest camera must do only two things: (1) hold the film flat against the back side of the camera and (2) expose this film to light for a fraction of a second. While even the most inexpensive box cameras have such refinements as a convenient way to advance the film so that an unexposed area is moved into position for the next exposure, cameras of all types and price ranges operate about this simple principle.

Let us assume that you have already selected the camera which seems most suitable for your picture-taking needs. Probably the first thing you did was to sit down with the camera and its instruction manual to get acquainted with its features and adjustments. If you bought the camera without its instruction booklet from a friend, don't hesitate to write to the manufacturer asking for one. He will be happy to honor your request, for he naturally wants to have you get good pictures, and be satisfied with the camera he made.

Since all cameras perform essentially the same task, the basic rules will be the same, whether you have a box, simple folding, folding, miniature or reflex camera. Let's check over the important parts of cameras so we can get a clearer understanding of them.

LIGHT-TIGHT BOXES.—Regardless of their shape, all cameras are fundamentally light-tight boxes. Sometimes they are in the true box form, at other times they are collapsible, either through having telescoping parts or a bellows arrangement. The Ansco Flash Clipper Camera is an example of the telescoping type, while the Ansco Speedex is an example of the latter, having a bellows which allows it to be folded.

LENSES.—The camera lens is an extremely important part of a camera, since it has total influence over the image-forming light which strikes the film. Lenses take many forms, from the simple single-element lens, usually

found in the most economical box cameras, to the most highly corrected anastigmat (free from distortion) lens which may be composed of six or eight or even more very carefully ground elements. Generally speaking, the more complex (greater number of elements) a lens is, the greater its photographic capacity. The better lenses usually produce more accurate images and allow photographs to be taken with less light.

SHUTTERS.—The shutter controls the duration of the exposure. While there are three kinds of shutters commonly used on cameras designed for normal picture-taking purposes, we shall be concerned with only two of these types—the single blade shutter and the between-the-lens shutter. The third shutter type is the focal plane shutter frequently found on press cameras and other cameras having very high shutter speeds. The single blade shutter, which usually equips box cameras, gives exposures of about $1/35$ or $1/50$ of a second. It also may be adjusted to give time exposures, the shutter then opens when the release lever is pressed and remains open until the release lever is again pressed. Although this simple type of shutter gives the photographer little choice in snapshot exposure speed, it is economical, simple to operate and suitable for varied pictures in outdoor light. Single blade shutters equipped with the time exposure feature may be used for indoor pictures using photographic flood lights.

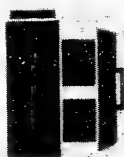
The between-the-lens type of shutter, as its name implies, is located between the lens elements. A variety of shutter speeds is usually offered by this type of shutter, the choice usually ranging from Time, Bulb (a setting at which the shutter remains open as long as the shutter release is held down), $1/25$, $1/50$ and $1/100$, to Time, Bulb, one full second to $1/400$ second. In general, the wider selection of speeds is preferable. This type of shutter may be easily adapted for synchronized flash, and some have built-in synchronization, permitting the use of any simple flash unit.

DIAPHRAGMS.—The diaphragm (aperture) is an adjustable opening placed near or between the elements of the lens. It is usually employed on folding cameras with fast lenses, rather than on cameras of the box type. A large opening permits more light to pass through the lens to the film in a given length of time, while a small opening cuts down the amount of light, assuming equal conditions.

FINDERS.—The camera finder is provided for aiming the camera to in-



BOX



SIMPLE FOLDING

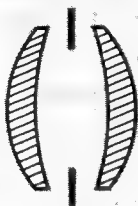


FOLDING

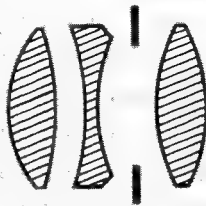
CAMERA



MENISCUS

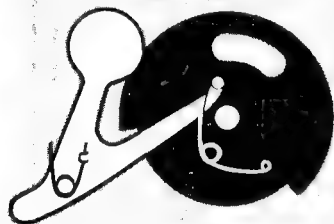


DOUBLET

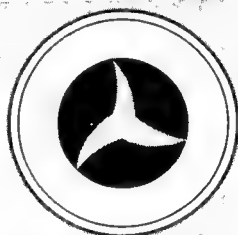


ANASTIGMAT

LENS

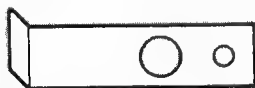


SINGLE BLADE

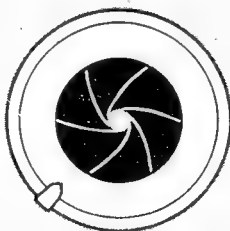


BETWEEN-THE-LENS

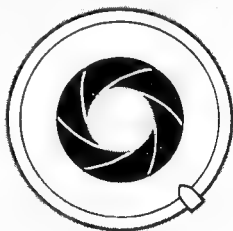
SHUTTER



SLIDE



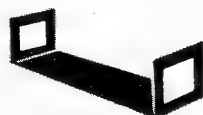
IRIS



DIAPHRAGM



WAIST-LEVEL



EYE-LEVEL



REFLEX

FINDER

clude the view to be photographed. These finders take many diversified forms, each having its own advantages. Most box cameras are equipped with a simple waist-level finder which reflects the image to a small square of ground glass in the top or side of the camera. These inexpensive view finders are not sufficiently corrected to show the exact view, particularly on close-ups.

A different principle is employed by the metal frame, sport frame and tubular finders. The photographer looks directly through two sights (in much the same manner that a rifle is aimed). While the sport frame finder does not employ optical elements and the metal frame finder may or may not use them, the tubular finder usually has lenses. The finder on reflex cameras is in the form of a negative-size ground glass focusing screen. This focusing screen has a great advantage in that it shows the same scene in the same size that will appear in the negative. This type of finder shows the effects of focusing, as well as allowing the photographer to compose his pictures accurately.

ADJUSTING YOUR CAMERA IS EASY.—If you are familiar with your camera, its proper adjustment for a photographic situation can be quickly and easily made. You will discover that knowing your camera will enable you to take good pictures indoors and at night, as well as outdoors. In short, familiarity with your camera means more photographic fun for you.

If you have several adjustments on your camera, it is best to adopt a simple routine when setting them. Following the same sequence each time, it is unlikely that you'll forget to adjust one of the controls. Below is a suggested sequence which many experienced photographers favor:

1. Focus the camera.
2. Set the shutter speed
(and cock shutter).
3. Adjust the aperture.
4. Aim the camera.
5. Press the shutter release lever.
6. Advance film.

FOCUSING THE CAMERA is accomplished by adjusting the distance between the lens and the film.

Users of fixed-focus cameras, such as the box camera, need not worry about focusing, since their cameras are in satisfactory focus for subjects from about 8 feet to infinity. Owners of focusing cameras should focus carefully, for this is the first step in taking a good picture. Focusing is usually accomplished by rotating the focusing scale on the lens mount of the camera so that the foot-age figure coincides with the estimated subject-camera distance. Spiral threads

in the focusing mechanism move the lens element forward and backward as the focusing ring is turned.

Reflex camera users have an advantage in that they can see the actual effects of focusing in the ground glass view finder. By turning the focusing knob, both camera lenses are focused simultaneously, with the result that the photographer knows exactly when his subject is in critical focus.

An important consideration in focusing is depth of field (often referred to as depth of focus). This is simply the distance range over which your picture is in focus. For instance, if a given lens is focused at 20 feet, a range from 14 to 33 feet may be in focus. In this case, the depth of field is from 14 to 33 feet. The depth of field increases with the distance for which the camera is focused, particular care being required when taking close-ups. It also depends on the aperture setting (see "Adjusting the Aperture"). It, therefore, is particularly important to focus accurately when taking close-up shots, or using wide apertures.

SETTING THE SHUTTER SPEED regulates the length of time the shutter is open. This adjustment does not, of course, appear on box cameras which do not offer a choice of snapshot shutter speeds. However, on other cameras the shutter setting control or ring usually appears on the lens mount near the aperture lever. When you choose a shutter speed for a given picture, do not select the highest possible speed. This will result in the possibility of under-exposure or out-of-focus pictures due to the use of a large aperture. Using a large aperture means that your subject will be in sharp focus over a limited range; its foreground and background will be out of focus. This is termed "shallow depth of field." As you can see, this imposes unnecessary restrictions on accurate focusing and does not give the novice much leeway for error.

Instead, use the slowest shutter speed that you are sure will freeze the motion of your subject. For persons walking obliquely or directly toward your camera, $1/50$ of a second is usually sufficiently short. For slowly moving automobiles, trotting horses, bicycles and running people approaching the camera from an angle, $1/100$ of a second is about right. For athletic events and other situations where fast action takes place, the shutter speed should be at least $1/100$ of a second.

Only *after* you have adjusted the shutter should you cock the shutter. Otherwise the shutter mechanism may ultimately be damaged.

ADJUSTING THE APERTURE is regulating the size of the circular hole through which the lens admits light. This is usually accomplished by moving a small lever mounted on the lens barrel. This lever controls the size of the aperture. The aperture size is calibrated in f numbers, and it is important to remember that as the lens aperture is *increased*, depth of field will *decrease*. So if you want all parts of your picture sharp, use a small aperture.

Some of the more inexpensive cameras have a sliding bar aperture adjustment. This usually takes the form of a flat bar extending from the lens vertically to the top of the camera or laterally to the side of the camera. If your box camera has such an adjustment, make sure that you know how it works.

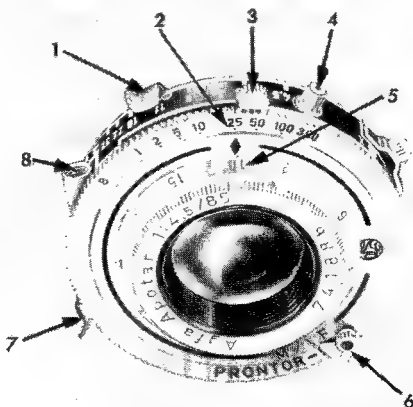
AIMING THE CAMERA is simple. However, it is not so simple as it appears on the surface, as some disappointed camera fans can tell you. For one thing, it is advisable to fill your view with the subject. Approach as close to your subject as you believe safe. Box camera users are not necessarily prevented from approaching nearer than 6 or 8 feet from the subject, for supplementary (portrait) lenses are available which allow box cameras to be used for distances as close as 3 feet with satisfactory results.

Since the view finder is not in exactly the same position as the lens it usually does not show exactly the same scene that the negative will record. This variation is called parallax. The effects of parallax are particularly noticeable on close-ups. Since the view finder is usually higher than the lens, there is sometimes a tendency on the photographer's part to cut off the heads of his

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TYPICAL CAMERA ADJUSTMENTS

1. DIAPHRAGM SETTING LEVER
2. SHUTTER SPEED SCALE
3. SHUTTER COCKING LEVER
4. FLASH CONTACT
5. FOCUSING (FOOTAGE) SCALE
6. SHUTTER DELAY LEVER
7. SHUTTER RELEASE LEVER
8. CABLE RELEASE SOCKET



subject. While this type of mutilation is not illegal, it is disappointing to receive prints of one's friends only to discover that they no longer possess heads. The photographer may compensate for this by aiming the camera a bit higher than is apparently necessary.

Some box cameras have separate view finders for horizontal and vertical pictures. Other cameras have only one view finder which is used for both types of pictures. Unless your camera takes square pictures, you will want to decide whether these scenes should be presented in a horizontal or vertical form before tripping the shutter. Hold the camera in the appropriate position as you take the picture.

PRESSING THE SHUTTER RELEASE involves only the movement of one finger, yet there is a definite technique for doing it right. The shutter should not be released by a sudden spasmodic pressure, but should be gently pressed down with the camera held steady in the hands. Cultivate a smooth technique in tripping the shutter and you will avoid blurred pictures caused by camera movement. Expert sharp-shooters who win on the rifle range develop a "trigger squeeze." Develop a good shutter squeeze and you will improve your chances for winning photographs.

ADVANCING THE FILM should be done immediately following every exposure. If you incorporate this act into your picture-taking routine, you will always be ready for an unexpected picture opportunity. Better than that, you will be in no danger of losing two good exposures by making a double exposure.

KNOW YOUR FILM

Equal in importance to knowing your camera is knowing the film you use. From a physical aspect, photographic film consists essentially of a transparent flexible base coated with a gelatin emulsion in which finely divided particles of silver salts are suspended. Such a film is capable of making a permanent record of the scene to which it is exposed for a fraction of a second.

One of the most popular films for general outdoor photography is Ansco Plenachrome. This film is offered in all standard roll sizes to fit roll film cameras of every description, and box cameras and readysets are designed to give average exposure with this film outdoors in bright sunlight.

Plenachrome is an orthochromatic film; it is sensitive to all colors, save

red. This means that red objects, such as red lips, apples and clothing, will register as only a slight image in the negative. The result is, of course, that reds will appear somewhat darker than normal in the prints you place in your album. This is not the problem that it might appear at first glance, however. A slightly unnatural effect is often more desirable than an exact reproduction of a scene or a subject as seen by the human eye. Then too, pure red in nature is extremely rare.

If you plan to use your camera on a dull day, or if you plan to take pictures at night, you may discover that a panchromatic film, such as Ansco Supreme or Superpan Press Film is better suited to your purpose. While orthochromatic films give satisfactory results indoors and at night when time exposures are used, they do not have the extra film speed (or sensitivity) under artificial light that the panchromatic films have. The reason? Panchromatic films are sensitive to all colors, including red.

While Ansco Supreme requires the same exposure as Plenachrome when used outdoors in natural light, it is more sensitive to artificial light, due to its extra red sensitivity. For situations where extreme film speed is desirable — where the light is weak, or hand-held exposures must be made under adverse conditions — Ansco Superpan Press is a fine choice.

If you are just starting to enjoy photography, do not choose the fastest possible film until you have learned how to expose a good orthochromatic film; orthochromatic films are fully as capable for general outdoor photography as the more expensive panchromatic films. Also, stick to one film until you learn its characteristics, how it responds. Don't change film types every time you purchase a new roll.

And remember too, that box cameras are not suited for exposing Ansco Color Film! A camera having a lens opening to at least $f/6.3$ is necessary if you are going to get good results with Ansco Color Film.

KNOW YOUR FILTERS

Filters are used either to correct or to over-correct certain colors being rendered in the monochrome print. Sometimes filters are used to compensate for the fact that the film does not always see the subject in the same manner that our eyes do. When filters are used for this purpose, they are termed "correction filters." The medium yellow filter is the most universally used correction filter.

Sometimes, as in the photography of colored objects, it is desirable to distort color values for a purpose, say to make a certain object or objects appear lighter or darker in the print. Filters used to obtain extra contrast in this manner are called, logically enough, "contrast filters." A general rule to remember when using filters: *Filters tend to lighten objects of the same color.* A red filter is an example of a contrast filter.

Filters are in themselves simple enough. You merely place them in front of your lens, lengthen the exposure accordingly and trip the shutter in the usual way. It is knowing *when* to use a filter (and when *not* to) that often makes the difference between a good picture and one that is only acceptable. Let's discuss typical situations in which filters can improve your pictures:

FOR BRINGING OUT CLOUDS. — Probably some of us have already been surprised by having bald white skies over a particular landscape which we thought would be handsome indeed. It was a bit disappointing, for when the picture was taken there was a bright, blue sky filled with fleecy white clouds. Such disappointments are due to the fact that the film, unlike the human eye,



cannot always differentiate between the blue of the sky and the white of the clouds.

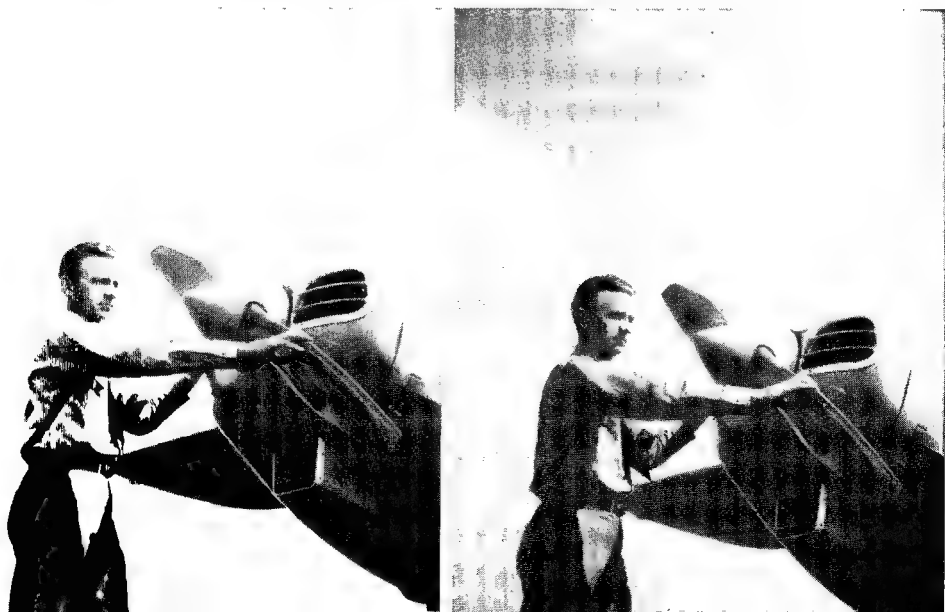
However, using a medium yellow filter will correct the situation in an almost magical way. The medium yellow filter allows most of the light reflected from the clouds to pass through, but it holds back the blue light reflected from the sky. The result? A dark sky with white clouds in your print. A green filter used with orthochromatic film will also give you approximately the same result.

Sometimes a photographer desires a more dramatic effect. Using a red filter with panchromatic film will usually cause the blue sky to appear unnaturally dark — an example of the use of a contrast filter.

FOR DISTANT DETAIL. — Although orange and red filters have comparatively high filter factors, unusual effects can be obtained when they are used with a panchromatic film. The sky will be rendered very dark and clouds will stand out in brilliant contrast. Great improvement is sometimes possible by using these filters when photographing distant objects. Atmospheric haze disperses the rays of light coming from a distant object, but this scattering is more pronounced for short wave lengths such as blue, than for longer wave lengths such as red. Therefore, by using a red or other blue-extinction filter, the effects of haze can be minimized.

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Use a medium yellow or green filter to bring out clouds.



CLASSIFICATION FOR FILTER FACTORS

GROUP	FILM
II—Plenachrome	
III—Supreme	
	Ultra-Speed Panchromatic
	Superpan Press

FILTER FACTOR TABLE

Filter	Corresponding Wratten Filter	Classification Groups			
		II		III	
		Day.	Tung.	Day.	Tung.
Light Yellow	K1	2	1.5	1.5	1.5
Medium Yellow	K2	3	2	2	1.5
Deep Yellow	G	6	4	3	2
Light Green	X1	4	3	4	3
Green	X2	5	4	5	4
Red	25 (A)	—	—	8	5

FOR PHOTOGRAPHING COLORED OBJECTS.—Filters are also used to give more pleasing rendition of colored objects. By using yellow or green filters with panchromatic films, the tone relationships of photographs can be made to approximate those seen by the human eye; occasionally tone values can be improved by intentionally falsifying them. An example of this latter case is found in photographing flowers. Taken without a filter, red petals and green leaves may appear to be practically the same tone of gray. A more satisfactory (though less accurate) rendition may be obtained by using a red filter. This will allow transmission of a higher percentage of the red light from the petals, making the leaves darker and giving a more pleasing monochromatic tone reproduction of the color values of the subject.



PICTURE-TAKING IS EASY

YOU HAVE probably heard gardening enthusiasts refer enviously to another successful amateur gardener as having a "green thumb." Everything the "green thumber" plants seems to grow especially well — just for him, apparently. Whether it is true of gardeners or not, there are no true "green thumbs" among camera fans, for taking good pictures depends upon simple rules which are easily mastered by anyone.

Persons who seem to be "natural born photographers" have the knack of taking fine photographs only because they (perhaps unknowingly) conform to these rules to a large extent. Here are the rules; follow them, practice a bit, and it won't be long before your friends will say of you, "He's a natural born photographer, you know!"

1. Always load and unload the camera in subdued light — never in direct sunlight or intense artificial light.
2. Do not allow the sun, a flood light or a flash lamp to shine on the camera lens as you take the picture.
3. Focus the camera carefully. If you can't estimate close distances accurately, pace it off and make sure; one long step equals about 3 feet.
4. Estimate light conditions critically — use a meter or calculator if possible — and adjust the aperture and shutter speed. Tend to overexpose when in doubt.
5. Stop subject motion by using a higher shutter speed or changing camera position so that the line of movement is toward you.

6. Hold the camera steady and level as you aim it to locate the subject in the view finder. Never hold the camera in your hands for exposures longer than $1/25$ of a second; instead, use a tripod, table, or other firm support.

7. Wind the film to the next frame number so you won't take two pictures on the same section of the roll, spoiling both photographs.

These seven suggestions for handling your camera correctly apply to both outdoor and indoor picture-taking, regardless of the time of day. This is a long way toward making excellent photographs, but there is also the subject's appearance to think about. Since subject considerations differ with the photographic conditions, let's discuss them by examining situations usually encountered.

TAKING PICTURES OUTDOORS

Most amateur photography takes place outdoors during the daylight hours. This is not surprising, for most outdoor activities take place during the day and plenty of light is almost always present for photographic purposes.

However, a superabundance of light does not mean that the snapshot artists' illumination problems are automatically solved. The way the light is distributed over the subject, the angle from which it strikes, and the amount of reflected light from clouds and other objects are also factors which influence the quality of the final print.

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Make sure your subject is well lighted before you shoot.



Aside from the question of estimating or calculating the proper exposure, lighting can radically alter the appearance of the subject. Very intense direct light with little or no reflection will often produce a harsh, angular effect. Softer lighting will yield the rounded "modeling" which most photographers seek. Slight overcasts and reflections from water, light-colored clothing, houses and walls are helpful in softening the lighting effect. On the other hand, very diffuse lighting gives a disappointing "flat" look to many subjects; such lighting is often predominant on hazy overcast days when no shadows are in evidence.

The amateur photographers' primary source of light for outdoor photography during the day is the sun. Hence, changing the position of this main light is impractical. Yet snapshotters can alter their lighting effects very easily.

The first method used is obvious — they wait until the sun is in the position which produces the desired lighting effect. The second way in which the photographer can alter the relative position of the sun is by changing his own position. He may try several camera angles to determine which one makes his subject look best.

While there isn't much that can be done about very soft lighting, you can often diffuse lighting that is harsh and unflattering. Such lighting occurs on very brilliant days when the sun is high. Place your subject near a white wall, a light-colored house or beach umbrella to take advantage of reflected light. Even placing them near a line of laundry hung to dry proves helpful!

Persons being photographed do not need to squint into the sun as the shutter is snapped; this is just a carry-over from the old days when slower emulsions required that all possible illumination be used in order to shorten a long exposure time. Actually, results will often be improved if the light comes in from the side of your subject. And in this way you need not worry about your own shadow being included in the picture.

Concluding these suggestions about lighting, photographers should remember that lighting is a means to an end, not an end in itself. If the lighting is sufficient to record a satisfactory image on the film and if it makes your subject look the way you want it to look, that's all there is to it.

Landscapes are a favorite subject of photographers. They are universal in their appeal and offer the picture-taker endless variety. It's a good idea to

remember that a smaller scene may make a better photographic study than a panoramic view which encompasses several times the area. Remember also to use a yellow or green filter if you want to bring out the clouds, and don't forget to increase your exposure when exposing through a filter!

In taking pictures of moving subjects, be sure to stop subjects in motion. Select a shutter speed which is fast enough to freeze the action if your camera offers a choice of speeds. If your camera does not have a range of shutter speeds, you can take advantage of other factors which control image blurring due to motion. The shutter's ability to record moving subjects at a given shutter speed depends upon three conditions:

- 1 — Speed of subject motion.
- 2 — Direction of subject motion in relation to camera.
- 3 — Distance from camera to subject.

All photographers will find the above conditions interesting. Users of box and other cameras which do not offer a choice of shutter speeds will find these three factors of particular significance.

For example, although the camera fan usually cannot control subject speed, he can choose the instant in which the photograph is made, being alert and watching action carefully for moments when movement is momentarily suspended or slowed. In photographing a baseball game this moment might occur when the batter finishes his follow-through, or a runner has just slid into third, dust flying. Box cameras can take excellent action pictures of this type for swift motion is not necessary in obtaining the appearance of action.

Another way in which snapshooters can take action pictures at relatively slow shutter speeds is by having the direction of movement approach or recede from the camera. The more directly the line of the moving subject approaches the camera, the better the chances are that the motion will be stopped by the shutter. If you want to snap the neighbor's son as he rides on his new bicycle, take your stance ahead and a little to one side of him, clicking the shutter as he rides toward you. Doing this, there is less chance that the picture will be blurred than if you attempted to photograph him as he rides across the field of view.

OUTDOOR EXPOSURE TABLE
FOR
ANSCO PLENACHROME AND ANSCO SUPREME FILM

(Fractions of Seconds)

<i>Lens Opening</i>	LIGHT CONDITIONS			
	<i>Bright Sunlight</i>	<i>Hazy Sunlight</i>	<i>Bright Overcast</i>	<i>Dull Overcast</i>
f/22	25th	10th	5th	1/2
f/16	50th	25th	10th	5th
f/11	100th	50th	25th	10th
f/8	200th	100th	50th	25th
f/6.3	300th	150th	75th	35th

Give 1/2 exposure for brilliantly lighted scenes, such as bright snow scenes, landscapes, beach scenes and seascapes. For close-up subjects give 2 to 4 times exposure indicated in table. Treat subjects in shade and dark foregrounds similarly.

The camera-subject distance also governs the subject speed which your shutter can satisfactorily record. The farther the subjects are from the camera, the easier it is for your camera to get clear images of moving objects. This is easy to understand, for an airplane seems to move slowly in the sky, but if you were close to it, the airplane would rush by you so fast it would blow your hat off. Though moving farther away from your moving subject helps, remember that the negative images will get smaller as you increase your camera-subject distance. It is much better to use timing and camera angle to assist in photographing motion, instead of shooting from longer distances. (Also see "Setting the Shutter Speed" on page 21.)

Taking outdoor snapshots during the day offers amateurs many opportunities for fun and pictures. When you go for a ride, on a picnic, or to a ball game, take a camera along. All you need is an inexpensive camera, some Plenachrome "All-Weather" film and—if you want to be real professional about it—a light yellow (or green) filter.

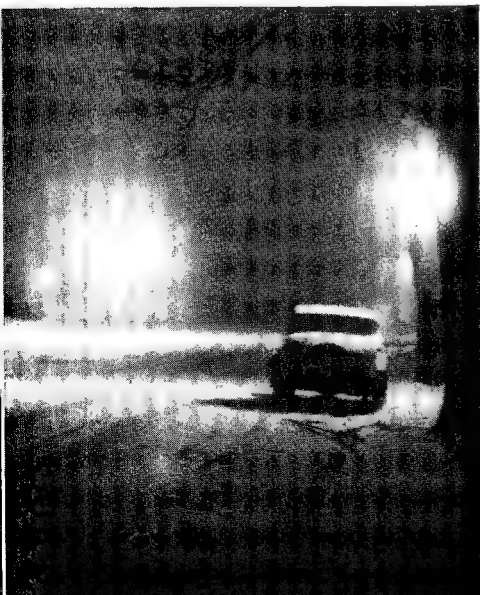
OUTDOOR PICTURES TAKEN AT NIGHT are unusual and fascinating, even when familiar scenes are the subject. Yet many photographers haven't had the thrill of taking pictures at night outdoors, probably because they don't realize how easy it is. Furthermore, extra equipment is not required for picture-taking at night, although it sometimes makes things more convenient.

There are many opportunities for easy-to-take pictures at night — pictures that will round out your album and give you and your friends years of pleasure. If you have a camera with a flash attachment you can take pictures at night about as easily as you can in the daytime. If your camera does not have provision for flash, there are a host of opportunities for photographing subjects by existing night illumination; store windows, lighted streets and parks, and city buildings are all examples.

Remember, too, that rain is as good for night picture-taking as it is bad for daylight picture-taking. Many fine shots owe their appeal to the reflection of city lights upon wet pavement. Look for opportunities to show the reflection of light from water, from little puddles to rivers and lakes.

The essentials for picture-taking at night are almost as simple and inexpensive as those for daylight outdoor snapshooting, for all you will require is a simple camera, some Ansco film, plus a steady place to set the camera while you make the time exposure.

A night picture, and a "moonlight" picture taken at sunset.



Since weaker lighting conditions are usually encountered at night, extended exposure times will be required. Instead of exposing the film to our subject for a fraction of a second, you will have to expose it for a full second, a few seconds, several seconds, or more. These long exposures are called time exposures. When time exposures are made by setting the shutter control at "T," the shutter does not open, then close immediately, but remains open when the release lever is pressed. To close the shutter, merely press the release lever a second time. By measuring the time between opening and closing the shutter you can make exposures of any desired length.

When time exposures are used, two conditions must be fulfilled throughout the time the shutter is open:

1. The camera must be perfectly still.
2. The subject must remain motionless.

Box cameras should be placed on a firm, level support to keep them from moving. Any handy tree stump, bench or part of a building can probably be used. If your camera has a tripod socket, you will find it very handy to have a tripod to set your camera on — it saves searching for suitable camera supports.

If your camera has a cable release socket, there will be less chance that you'll move the camera when opening or closing the shutter, if you invest a few cents in a cable release. A cable release is merely a flexible device which allows you to trip the shutter without touching (and perhaps consequently moving) the camera.

Pictures at night can be taken on either Ansco Plenachrome, Supreme or Superpan Press Film. However, exposures can be shorter if a panchromatic film, such as Ansco Supreme or Superpan Press, is used. These films, with their extra sensitivity to red light, are more efficient for picture-taking with artificial light.

If your camera is equipped with flash, you are ready to preserve happy scenes of autumn corn roasts and other friendly night gatherings. Remember that there are no light walls to reflect the light when you use flash outdoors; so, if it is practical, use the large size flash lamp for your outdoor flash photography.

TAKING PICTURES INDOORS

Contrary to what many photographers believe, it is very simple to take pictures indoors. In the first place, the photographer can "manufacture" his own conditions; he does not have to take his subject and lighting as he finds them, but can arrange them to suit his wishes. And no costly equipment is required for enjoying photography indoors — the most essential requisite is a firm, level place for the camera during the longer exposures which will be needed. Concerning the illumination you use, pictures may be taken by daylight coming in through the window, by regular house lamps, floodlamps or flashlamps. If you desire to use flood or flash lamps, you will find that these are relatively inexpensive and are easy to place by following the diagrams given in this section. So, if it is a blustery day or a chilly night outside, try taking pictures indoors. You will have a lot of fun and like the results you get.

PICTURES BY NATURAL LIGHT. — Unless you live in a glass house, short time or bulb exposures will be required when taking pictures indoors, even on bright days. Place the subject near a window in a well-illuminated position, place the camera next to the window wall so that the window is not promi-

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Indoor pictures by daylight are easy — just follow the diagram.



EXPOSURE TABLE FOR PICTURES INDOORS BY DAYLIGHT ILLUMINATION

(Based on Use of Ansco Supreme Film)

RECOMMENDED EXPOSURE AT $f/16$

<i>Light Conditions Outside</i>	<i>Dark Colored Walls</i>		<i>Medium Colored Walls</i>		<i>Light Colored Walls</i>	
	<i>One Window</i>	<i>More Than One</i>	<i>One Window</i>	<i>More Than One</i>	<i>One Window</i>	<i>More Than One</i>
Bright Sunlight	30 sec.	20 sec.	15 sec.	10 sec.	7 sec.	4 sec.
Hazy Sunlight	1 min.	40 sec.	30 sec.	20 sec.	15 sec.	8 sec.
Bright Overcast	3 min.	2 min.	1 min.	40 sec.	30 sec.	16 sec.
Dull Overcast	5 min.	3 min.	2 min.	1½ min.	1 min.	30 sec.

nent in the field of view. Remember that you want to take a picture, not of the light, but of the subject illuminated by the light.

When you shoot toward a window, it is advisable to use a reflector to light the shadow side of your subject. Tin foil reflectors made by pasting wrappers of foil on cardboard are excellent, or you can use a large white sheet of paper. Follow the diagram on the opposite page.

Remember also that the color of the walls, the position of the sun in the sky, and the number of windows in the room all influence your exposures. In the table given above, the exposures are given for interior views of average size rooms. Shutter speeds indicate the usual box camera aperture of $f/16$.

If you are taking indoor portraits within 5 feet of a well-lighted window, $1/4$ of the exposure indicated will probably produce satisfactory results.

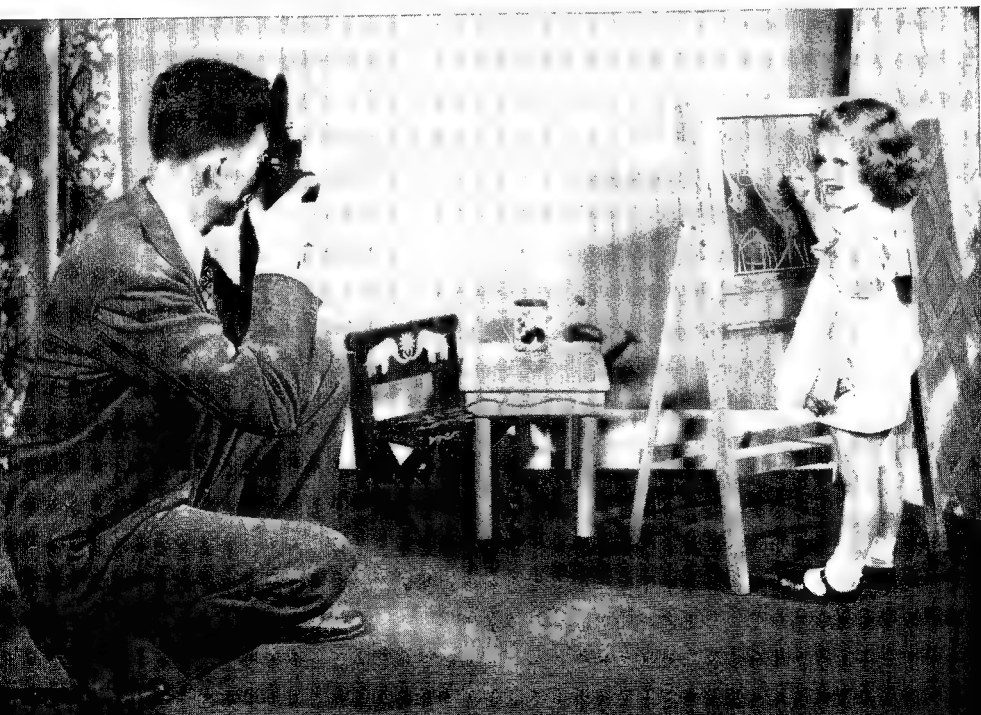
PICTURES INDOORS AT NIGHT. — The introduction of highly sensitive films, such as Ansco Superpan Press, has greatly simplified the problem of taking pictures indoors at night. By using time exposures, it is possible to obtain excellent photographs merely by using ordinary house light. However, you will find that it simplifies matters and shortens exposures if you decide to purchase one or two floodlamps. Floodlamps differ from flashlamps in that they burn steadily and may be used repeatedly, while flashlamps, as their name suggests, are good for only one instantaneous flash.

Regardless of the kind of lamp you use, reflectors are very helpful in concentrating the light on the subject. You need not purchase the more expensive metal reflectors, for it is now possible to purchase floodlamps with built-in reflectors.

USING FLASHLAMPS. — Flashlamps provide a single, intense flash of light when a current is passed through them. They cannot be used a second time. The flash, which lasts only a fraction of a second, takes place entirely within the bulb without noise or smoke. These efficient lamps make your camera entirely independent of sunlight and permit you to get good pictures at any

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Flash photography — the easy way to take pictures of children.



FLASHLAMP EXPOSURE TABLE FOR ANSCO SUPREME FILM

(Distances—Lamp to Subject)

<i>Lens Opening</i>	<i>Small Size Lamps</i>	<i>Medium Size Lamps</i>
f/22	6 to 9 ft.	8 to 12 ft.
f/16	8 to 12 ft.	12 to 16 ft.
f/11	12 to 16 ft.	16 to 25 ft.
f/8	16 to 25 ft.	25 to 35 ft.

Values shown assume shutter speed 1/50 second or slower.

Table does not apply to focal plane shutters.

time. If your camera is not equipped with a synchronized flash unit, such as that on the Ansco Readyflash camera, pictures can be taken by setting the camera at "time," opening the shutter, flashing the lamp, and then closing the shutter. Slight movement of the subject before and after the flash does not register on the film if other illumination in the room is not bright. Or you can make use of a flash synchronizer attachment which, when fitted to the camera, can be adjusted to flash the lamp at the instant the shutter is open.

Correct exposures for flashlamps will depend on the size of the lamp used, the distance it is from the subject and the efficiency of the reflector. See exposure table shown above. These exposures assume the use of a reflector. If one is not available, use the next larger lens opening, or shorten the distance from the lamp to the subject. For interiors with dark walls, double the exposure in a similar manner. The table has been computed for use with Ansco Supreme. Give one-half the indicated exposure when using Ansco Superpan Press Film.



SUBJECT

No. 1 FLOOD - MID

CAMERA - MID

No. 2 FLOOD - HIGH

A simple lighting setup. Back light (dotted line) may be added without changing the exposure time — see the print at right.

USING FLOODLAMPS.—Snapshots made with floodlamps for illumination usually require the use of a camera possessing an $f/11$ or faster lens. Successful pictures can be taken with a box camera using Superpan Press if the lights (one No. 1 floodlamp and one No. 2 floodlamp) are placed fairly close (4-5 ft.) to the subject. This will allow instantaneous exposures to be taken, but in case a lesser quantity of light is available, the camera should be placed on a tripod or some other firm support and the exposure made by using the camera set at "time."

Exact settings for the lens and shutter of a more versatile camera are indicated by the floodlamp table which is shown below. This table also has been computed for use with Ansco Supreme. With Ansco 35mm Ultra-speed Pan or with Ansco Superpan Press in the camera, one-half the exposure indicated in the table (one full lens stop less) may be used.

The proper placing of the lights is of utmost importance in indoor photography. More than one light source is generally used to obtain pleasing lighting on the subject; in this case all the lights should not be grouped together. They are divided into two general groups according to purpose—main, or modeling lights, and secondary, or shadow fill-in lights.

For indoor photographs of people, whether portraits or informal snapshots, the main lighting should be a good deal above and a little to the side of the subject so that the light strikes the subject at about a 45-degree angle. The secondary lighting should be placed on the opposite side of the camera. It

FLOODLAMP EXPOSURE TABLE FOR ANSCO SUPREME FILM

(Fractions of Seconds)

<i>Lens Opening</i>	<i>Distance of one each No. 1 and 2 lamps in Reflectors</i>		
	<i>4 ft.</i>	<i>6 ft.</i>	<i>8 ft.</i>
$f/22$	5th	$1/2$	1
$f/16$	10th	5th	$1/2$
$f/11$	25th	10th	5th
$f/8$	50th	25th	10th
$f/6.3$	75th	35th	15th

Give 2 to 4 times exposure for dark subjects, dark walls or surroundings. Values shown assume registration of each light on same area.

should be somewhat lower and less intense than the main light source and placed near the camera at approximately the same height as the lens.

Very often, instead of such secondary lighting, a large piece of light cardboard, a wall, mirror, or even a white tablecloth may be used as a reflector. When this is placed opposite the main light source, it helps to direct the light from the main source back into the shadows.

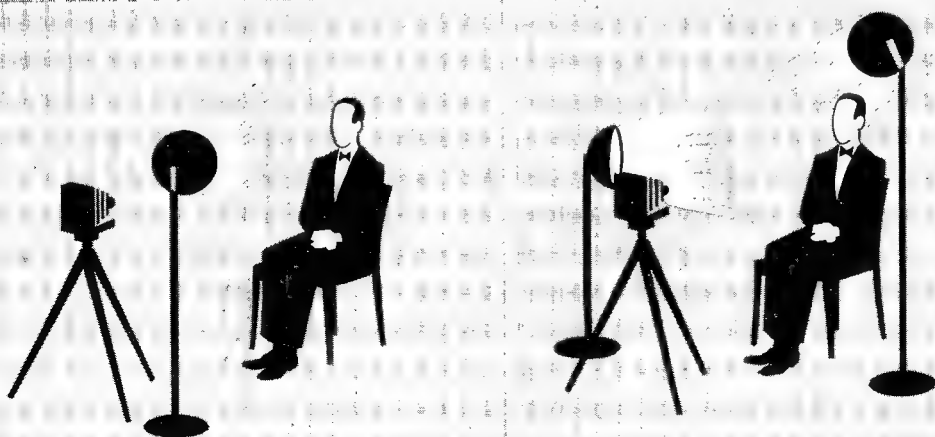
Softer results will be obtained if the main light is somewhat diffused by a sheet of translucent material, such as tissue paper, cheesecloth or tracing cloth, placed a few feet away in front of the lamp. When this is done, the exposure should be increased somewhat to compensate for the resulting loss in light intensity. For average room interiors, lights should be placed so that fairly even illumination is obtained, being careful not to include a bright light in the view.

For portraits and snapshots indoors, the position of the lights can be varied to produce the particular effect desired. The lighting diagrams illustrate some of the ways in which the lights can be used when making photographs of familiar indoor subjects.

INDOOR PICTURE SUGGESTIONS. — Posing your subject when taking a portrait is not so difficult as it may seem. The first thing you must strive for is to keep your subject entirely at ease, and free from strained or self-conscious expressions. Try to keep the person from thinking too much about being photographed.

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Typical arrangements for portrait photography.
Left, a setup for one lamp; right, a setup for two lamps.



There are other points to remember when taking portraits. Use a portrait attachment when it is desirable to have your subject closer than your camera will focus. A diffusion disk is sometimes desirable for softer, more pleasing results. Eliminate all complicated designs and intruding objects from your backgrounds. Be sure that the eyes of your subject are clearly visible and well lighted in respect to the rest of your portrait—they are usually one of the most important parts of the picture. If your subject wears glasses, try to avoid catching objectionable reflections in them. If your subject's hands are included, they should be subordinated, usually by directing less light to them. To increase picture-interest in your portrait, you will also find it helpful to include some bit of atmosphere—a book, a cigarette, or some object relating to the subject's personality, hobby or vocation.

Silhouettes can be made with your camera without black paper and shears. Surprisingly lifelike in their resemblance to the subject, they make attractive party decorations, novelty pictures, and have even been used as effective Christmas cards. Silhouettes are easy to make. Have your subject take a position about two feet in front of a white sheet hung from a doorway to provide a smooth, even background. Your camera should be placed about 6 feet from the subject, and carefully focused on the subject. The light source may be either a flood or flash lamp placed in a reflector approximately 3 feet behind the sheet. Be sure to have the camera, the subject and the light on a direct line with one another. Exposures may be calculated from the tables on pages 39 and 41.

Table-top photography is another interesting indoor pastime. Your only

Appealing portraits like these can be easily taken indoors at home.



additional requirement is a portrait attachment with which you can photograph subjects near at hand, using the top of a card table as your locale. You can then set the stage with tiny toy animals or dolls, and by using unusual lighting, get just the effect you desire on your miniature stage. The large image which you get by working close to your subject makes such photographs appear surprisingly realistic. By the use of clever camera angles and lighting, you can obtain striking results with this pastime. Try it — you'll find that the opportunities are unlimited.

SIMPLE TRICK PICTURES

You will recall that we mentioned you could turn one of your friends into "twins" or "triplets" through the magic of photography. It is really very simple, for all that is required is a very dark background; a dark unilluminated wall will do, or you can shoot toward an open door if there is unbroken darkness beyond.

If you'd like to take a picture of twins, pose your subject at one side of the black background and make a normal exposure with your camera on a tripod or firm support. Now, move your subject to the other side of the dark background, and without moving the camera or advancing the film, make another normal exposure. Caution — be sure that your subject's positions do not overlap.

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Below, backlighting was used in both table top and silhouette pictures.



You can show a friend as twins hitting himself on the head with a ball bat, or (what is more characteristic, perhaps) slapping himself on the back. If you have a large background, you can move your subject four times, making a normal exposure each time — a very easy way to obtain quadruplets.

"Ghost" pictures are just as easy as twin pictures, save in this case the subject is in the picture for only one exposure — and a half an exposure, at that. As in other interior photographs, the camera should be on a stationary support for both exposures. The ghost is posed in the picture, either dressed in clothes of a bygone era or swathed in a white sheet. One-half normal exposure is then given. After the first exposure has been made, the ghost vacates the scene and the shutter is again opened to give half normal exposure.

The result? A ghostly picture showing a transparent spirit. He can be about to strike, waiting for his next victim, opening a door (in search of another ghost, perhaps), or anything else you would like him to do. Furniture, stairs, walls, etc., which are behind the ghost show dimly through him, and the resulting effect is eerie indeed.

The suggestions above by no means represent all the possibilities for trick pictures that are open to you. With a little imagination and ingenuity, you'll discover other types of entertaining trick pictures, as well as many new variations of the "twins" and "ghost" types just discussed.

Trick pictures like these are entertaining and easy to take.





Safeguard your pictures by keeping them in an album.

Decorate your home with enlargements of your better pictures.



PROTECT YOUR PRINTS

YOUR PRINTS are like Savings Bonds, they increase in value as time goes by. Protect your prints as you would your bonds; keep them in an album or file. Most people prefer medium large albums that are handy to leaf through occasionally. Many people work on two or three albums at once, dedicating one to the family heir, one to family gatherings and a third to the humorous snapshots and those "that came out funny."

Don't let your snapshots get dirty, damaged or torn by keeping them loose in a drawer. You can spend as little as fifty or sixty cents on an album—a thrifty investment in future fun. And besides protecting your pictures against injury and loss, you'll know where they are the next time you look for them! There are also more expensive albums which look like costly books, and their fine appearance makes them a decorative addition for any room. But regardless of the kind of albums you buy, you really ought to assemble a little library of them. You'll be glad you did.

So far, we have talked about albums and prints, but what about the appealing pictures that you'd like everyone to see? And what about enlargements?

Both album-sized prints and enlargements may be tastefully displayed in a number of ways. The prints may be inserted in easel folders which give a photograph a dressed up look. Inexpensive easel folders are offered to fit prints of all standard sizes. Or you can frame your prize prints for safekeeping. Frames are offered in a great many styles and materials, from the antique-appearing miniature gilt frame to the modernistic transparent plastic one.

Durable leather pocket folders which hold from one to twelve album sized prints come in many styles. Pictures of loved ones can be carried constantly in such folders without undue wear and tear. Incidentally, these pocket folders with their transparent envelopes are excellent gifts. Just slip one or two photographs in one as a starter, make someone a present of it, and watch the proud recipient fill out his pocket collection!

Mounting the print on a mounting board is one of the most popular and economical ways of giving an enlargement a finishing touch; it is the universal method adopted by photographic exhibitors. The enlargement is held in place on the board by an adhesive, usually rubber cement or mounting tissue, which is carefully applied so that it forms a smooth, continuous bond between the print and the mounting board.

Don't forget to protect your negatives, too; remember, a lot of them are happen-only-once pictures that can never be replaced. Use your better photographs to decorate your home. A few framed enlargements on the wall will strike an informal decorative note; while a few photographs in easel folders will brighten up those bare corners.

A GOOD WAY TO MOUNT ENLARGEMENTS

STOCK MOUNT —————→

DECORATIVE OUTLINE —————→

ENLARGED PRINT —————→

PRINT TITLE —————→

SIGNATURE —————→



CAUSES OF PICTURE-TAKING FAILURES

MOST OF THE difficulties experienced by amateurs are caused by incorrect exposure and improper focusing. Difficulties with exposure can easily be avoided if the recommended lens and shutter settings are used. If you have had little experience in taking pictures, you may run into disappointing results, but with practice you will soon become proficient and find it easy to obtain good pictures even under unfavorable conditions.

Many snapshots, although fundamentally correct and properly focused and exposed, are failures because of some minor fault. By following the suggestions below you will be able to avoid such difficulties. Compare the illustration shown in each case and you will quickly realize the reason for each suggestion.

HANDLING FILM. Handle your film carefully when loading and unloading the camera to avoid light fog. Keep the leader or trailer strip of opaque paper tightly wound around the spool, or light may leak around the edges of the paper and spoil the film. Never load your camera in direct sunlight, or you may get streaks of white along the margins of your final prints.

CARE OF YOUR LENS. Dirt and condensation on the lens surface will cause hazy, misty pictures. Your lens should occasionally be cleaned with soft cleaning tissue or a soft linen handkerchief. Don't try to clean the lens of your camera with anything which might scratch its surface. (It's also good practice to dust out the interior of your camera occasionally.)

CAMERA MOVEMENT. Hold the camera steady, pressing it firmly against your body when taking a snapshot, and your pictures should not be blurred or indistinct. Hold your breath when you press the shutter release. If a shutter speed of slower than 1/25th of a second is required, use a tripod or some other firm support. The left picture below shows what happens when you move your camera. Note improvement in picture at the right.

"STOPPING" FAST ACTION. It's best not to take pictures of rapidly moving objects, unless your camera permits high shutter speeds. However, it is possible to "stop" motion with an ordinary camera, provided the subject moves toward or away from the camera, instead of across the field of view. Notice the two pictures at the top of page 51 showing one of the subjects moving across the field of view where a high shutter speed was required to avoid a blurred result.

HOLDING THE CAMERA. To prevent "tilted" pictures, like that shown at the bottom of the next page, hold the camera level. When photographing tall buildings, be careful not to tilt the camera at too great an angle since the sides of the building will then appear to converge. To avoid this, try taking the picture from some other building where your camera will be about half way between the base and the top of the building you wish to photograph.

50

Hold the camera steady when taking the picture.
Left, camera moved; right, camera steady.





Top: Camera position near line of movement helps stop action.

Bottom: Hold camera level when taking the picture.

Left, camera tilted; right, camera level.





Wind the film after each picture to avoid double exposures.



Be sure your subject is in focus before you take the picture.

Below: Examples of overexposure, correct exposure and underexposure.



DOUBLE EXPOSURE. Be sure to wind the film to the next exposure immediately after taking every picture. Always remember to do this and you will never find a double exposure like the one illustrated in the series at the top of the opposite page.

SUN ON THE LENS. Keep the sun from shining on the lens when taking pictures, for it often causes reflections known as "lens flare" within the lens. This frequently results in reducing print clarity, or producing geometrical light patterns in the print. It is not necessary to have the sun behind your back, since many beautiful and striking effects can be secured when photographing toward the light. However, under such conditions be certain to shade the lens with a lens shade, hat, or some other object, being careful, of course, to keep the sunshade out of the field of view. This will avoid a disappointing result.

FOCUSING. Focusing carefully is perhaps the most important of all the suggestions. Improper focusing causes the objects of primary importance to appear blurred or fuzzy. Focus your camera with care to make sure of obtaining sharp images. If your camera is a box camera, be sure that the subject is at least 6 or 8 feet away, unless a portrait attachment is used to permit "close-ups." Accurate focusing will avoid blurred, fuzzy pictures like the one shown on the preceding page.

DETERMINING PROPER EXPOSURE. Pictures that are over- or underexposed will be lacking in detail and clarity like the two shown at the bottom corners of the preceding page.

Underexposed negatives are characterized by loss of shadow details and, in general, by a weak or "thin" appearance. Although in cases of slight underexposure the picture can be salvaged by printing the negative on a high-contrast paper, severe underexposure (three or more stops less than normal for black and white films) usually renders the negative unsuitable for printing.

Overexposed negatives are characterized by extremely dense highlight areas and by higher-than-normal shadow densities. Highlight details are "blocked up" and when printed exhibit a chalky appearance.

As an average setting from which to deviate in determining the proper exposure, you will find it safe to use 1/50th of a second at f/16, or its equivalent, in bright sunshine. Whenever possible, consult an exposure guide or meter.



FOR BEST RESULTS USE BEST MATERIALS

ANSCO PHOTOGRAPHIC MATERIALS — the very best that can be made — are being produced in greater quantities than ever before to help you take better pictures. Over a hundred years of photographic experience goes into the manufacture of all materials. The result: an excellence that makes them outstanding in the photographic field. In 1842, the original business was established in New York City by Edward Anthony. Today, the home of Ansco is located in Binghamton, New York, where thousands of skilled workers in new and modern factories produce the finest photographic materials for amateur and professional use.

Ansco manufactures three black-and-white roll films of outstanding quality designed to fulfill every normal picture-taking need — Plenachrome, Supreme and Superpan Press. A natural color material, Ansco Color Film, is offered in both daylight and tungsten types to meet all requirements for full color photography. Ansco Color Film produces transparencies in natural color in cameras having lenses which open up to $f/6.3$ or greater.

Ansco Plenachrome is a fast, dependable, efficient roll film. Its high orthochromatic color sensitivity and effective speed insure good results under all conditions, while its wide latitude helps compensate for errors in exposure. Plenachrome has the proper contrast for prints of pleasing brilliance and is protected against halation by an efficient back coating.

Ansco Supreme is characterized by both a remarkably fine grain and unusually high speed. With this combination of highly desirable features together with moderately brilliant gradation and balanced panchromatic color sensitivity, Supreme represents the ideal material for all types of indoor and

outdoor photography at all times of the year. It is recommended for pictorial work, record photographs, informal portraits, scenic views, and innumerable subjects of a similar nature where a panchromatic film is needed.

Ansco Superpan Press has become famous among photographers for its amazing increase in light sensitivity over previous high-speed film. It is the ideal selection when highest possible film speed is required. Superpan Press also affords the photographer a wide exposure latitude, desirable negative brilliance and a balanced panchromatic color sensitivity. Excellent in either daylight or tungsten illumination, Superpan Press increases the versatility and the subject range of any camera.

For the miniature-camera enthusiast, 35mm spools and magazines are available in two different panchromatic types. The famous Supreme emulsion is packaged in this form and is widely popular for all-purpose use. Where a film of extremely high light sensitivity is required, Ansco Ultra-Speed Panchromatic is offered. It is ideal for photographs taken under difficult lighting conditions or when high shutter speeds and small openings are necessary.



AnSCO also manufactures a complete line of photographic papers in many pleasing surfaces. Among the numerous types available are three that are most popular with amateur photographers: Convira, for contact printing; and Brovira and Cykora for enlarging. Also supplied especially for photographic purposes are AnSCO laboratory-tested photographic chemicals.

DON'T FORGET COLOR!

Even if you are a beginner in photographic techniques, color photography has a lot to offer you. You'll get gorgeous, positive transparencies in full color — transparencies which you can project on a screen, place in a viewer or hold up to the light. Or you can have full-color prints made from them. If you can take pleasing snapshots in black-and-white, you can do the same thing on AnSCO Color Film.

While you should not attempt to expose AnSCO Color Film in a box camera, any camera having a lens which opens up to $f/6.3$ (or greater) will be suitable, providing AnSCO Color Film is offered in the appropriate size. This color film is available in 120, 620 and 828 rolls, standard and Memo daylight loading 35mm magazines, and in sheet film sizes from $2\frac{1}{4} \times 3\frac{1}{4}$ " to 8×10 ".

Put color photography on your list of things to enjoy — it's easy to do and satisfying, for you can process this color film yourself. And don't forget that you can make your own color prints, too. Just ask for AnSCO Color Printon . . . the new printing material for making full-color prints from color transparencies in one step. The whole process can be carried out in your own darkroom and requires only a little over an hour from Printon exposure to finished print.

Complete information on AnSCO Color Film and Printon will be found in AnSCO's booklet, "Color Photography Made Easy." Helpful suggestions regarding color processing, trouble shooting in color photography, and the use of filters with AnSCO Color Film and Printon are also included. If your AnSCO dealer does not have this book, it may be obtained by writing direct to AnSCO.

AnSCO materials are as fine as can be made by highly skilled workers in one of the world's most modern photographic plants. The AnSCO name is your guarantee of quality.

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Branches

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Export Department

405 LEXINGTON AVE., NEW YORK 17, N. Y.

In Canada

ANSCO OF CANADA LIMITED

Toronto 1, Ontario 60 Front Street W.





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